

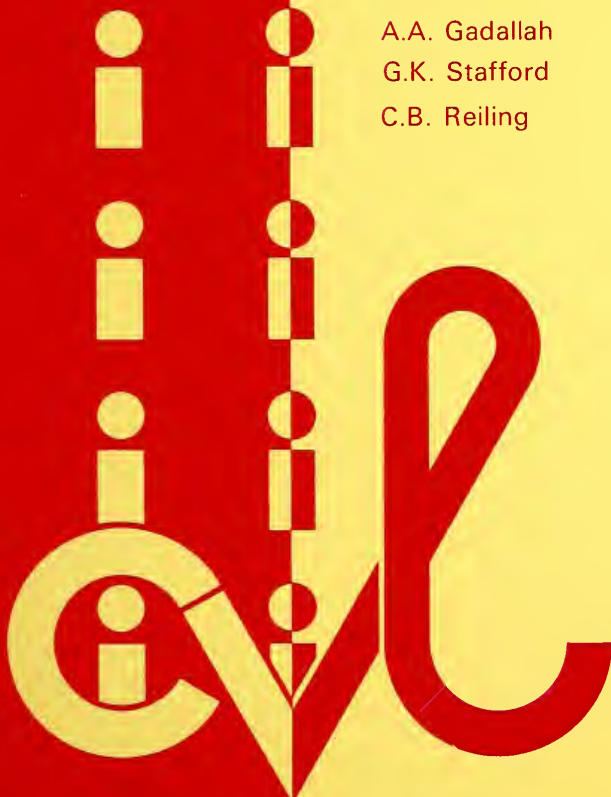


JOINT HIGHWAY RESEARCH PROJECT

JHRP-75-16

TRAFFIC SPEED REPORT
NO. 93

A.A. Gadallah
G.K. Stafford
C.B. Reiling



Interim Report

TO: J. F. McLaughlin, Director
Joint Highway Research Project

FROM: H. L. Michael, Associate Director
Joint Highway Research Project

July 30, 1975

Project: C-36-10C

File: 8-3-3

The attached "Traffic Speed Report No. 93" is a report of the rural traffic speeds on Indiana highways as found in the April-June 1975 period. Beginning with this report an annual report will be made in the July-September period each year and report using a portion of the same stations will be made for each calendar quarter of the year. This is the first of these latter reports.

The primary findings of this report is that speeds of cars and trucks were very similar during the April-June 1975 period to those found in the July-September 1974 period (1974 annual report period). Details of the speed results are provided.

Beginning with the next report, this Study will be a part of the FY 1976 Work Program of the ISHC and will utilize HPR, Part I, funds.

Copies of this report are requested for release to the Indiana State Police, the Indiana Traffic Safety Council and the Indiana Department of Traffic Safety and Vehicle Inspection as a normal procedure for these reports. Copies will also be sent to the Federal Highway Administration and several departments within the ISHC. The report is presented for the record and for release as noted.

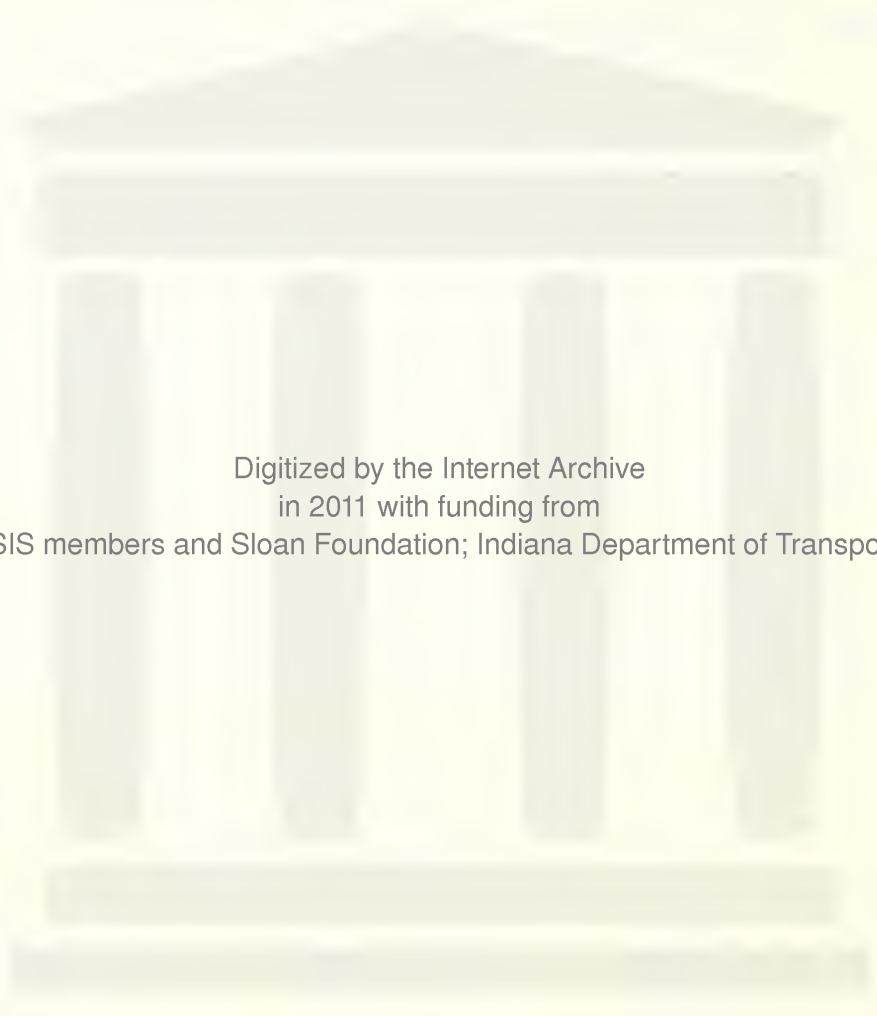
Respectfully submitted,

Harold & Michael

Harold L. Michael
Associate Director

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Interim Report
TRAFFIC SPEED REPORT NO. 93

by

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Project No.: C-36-10C

File No.: 8-3-3

Engineering Experiment Station
Purdue University
In Cooperation with
Indiana State Highway Commission

Purdue University
West Lafayette, Indiana
July 30, 1975

ABSTRACT

This report is another on the continuing study of speeds of vehicles on rural Indiana Highways. Observations of spot speeds were taken on interstate, four-lane and two-lane highways throughout the state during the months of May and June 1975.

Analysis of the speeds showed the overall average speed for passenger cars was 57.6 miles per hour. The overall average speed for heavy trucks was 55.5 miles per hour. This was about the same overall average speed for passenger cars and for trucks, as compared to the data collected in June-September 1974 (Speed Report No. 92). No trend of increase in travel speeds is as yet apparent under the 55 mph maximum speed limit.

TRAFFIC SPEED REPORT NO. 93

This report is an analysis of spot speed observations made during May and June 1975. All observations were made of free-flowing vehicles on level, tangent sections of rural highways during daylight and under favorable conditions. Six stations were studied from the same locations on selected Federal and State highways as used for many years.

Stations were classified as two-lane, four-lane, or interstate highways. A representative sample of spot speeds was obtained at each of the two stations in each classification. The site locations of the annual stations were as follows: (See Figure A)

Interstate Highways

- | | |
|-----------|---|
| * 1. I-69 | 3.3 miles south of Junction SR 18 |
| 2. I-65 | 1.0 miles west of Junction SR 334 |
| * 3. I-74 | 1.0 miles each of Junction of Post Road |
| 4. I-65 | 7.5 miles north of Junction of SR 160 |

Four Lane Highways

- | | |
|--------------|--|
| * 5. U.S. 31 | 1.2 miles south of Junction of SR 38 |
| 6. U.S. 52 | 1.0 mile east of Junction of SR 28 |
| 7. U.S. 41 | 1.0 mile north of South Junction of SR 2 |
| * 8. U.S. 52 | 1.0 mile west of Klondike |

Two Lane Highways

- | | |
|--------------|------------------------------------|
| * 9. U.S. 35 | 1.5 miles each of Junction of I-69 |
| 10. S.R. 73 | 2.0 miles south of Chalmers |
| 11. U.S. 31 | 3.0 miles south of Rochester |
| *12. S.R. 25 | 0.7 miles west of Americus |

*Stations used in this study.

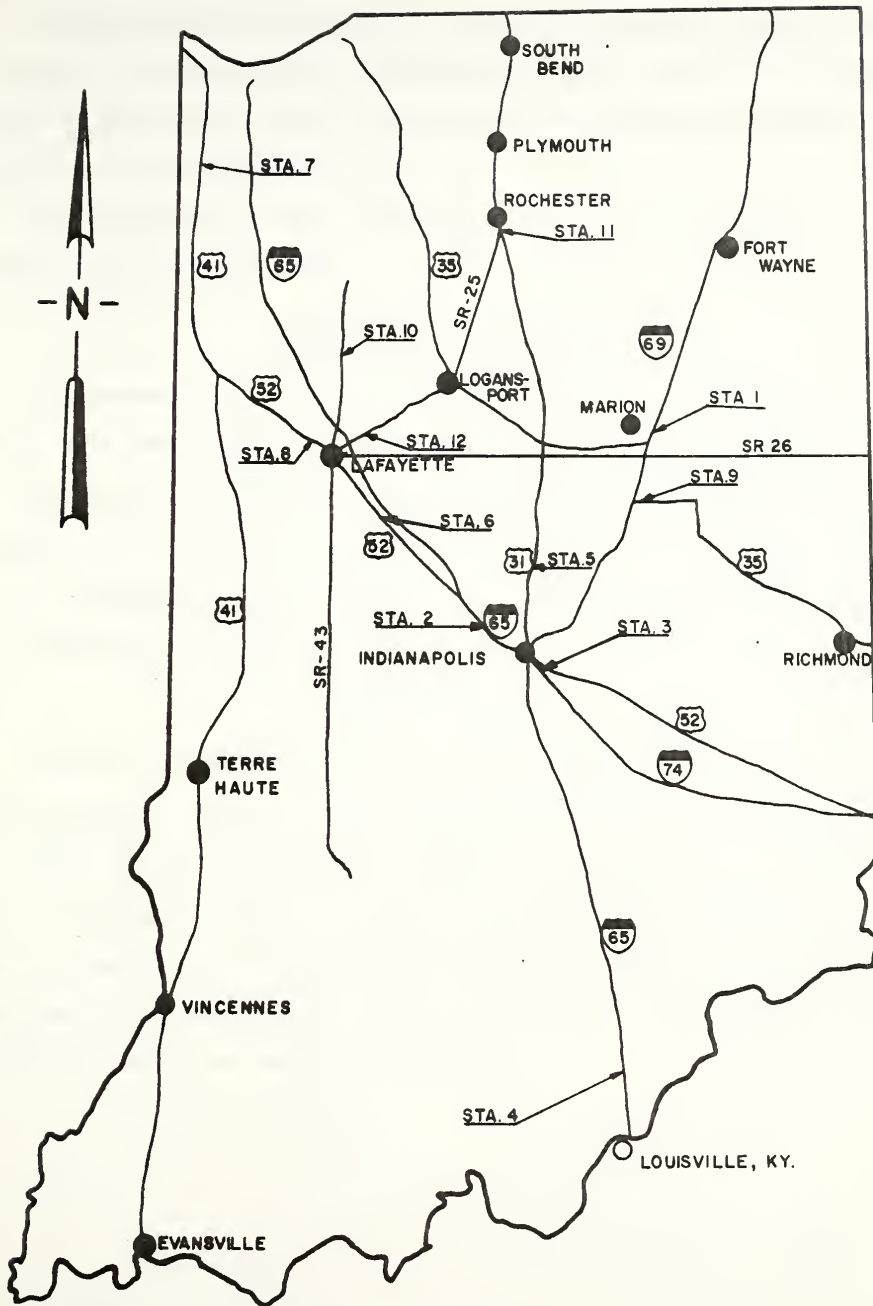


FIG. A - LOCATIONS OF SPEED-STUDY STATIONS

The vehicles were classified as Indiana or Non-Indiana Passenger Cars and Light (less than 5000 lbs. gross weight) or Heavy (equal to or more than 5000 lbs. gross weight) Trucks. The analysis was performed as classified and combined, passenger cars or trucks.

The maximum speed limit in Indiana is 55 miles per hour, both on Interstate and other rural highways.

Equipment and Field Procedure

The observations for this study were obtained by use of an "Electronic" Radar Speed Meter. The meter was placed approximately four feet from the edge of the pavement at angles less than 10° with the highway center line. No corrections of speeds were necessary at these small angles. At the beginning of the study the accuracy of the meter was checked and any constant discrepancy of readings was corrected accordingly.

RESULTS OF ANALYSIS

The data collected were analyzed and are summarized in Tables 1 to 6 in the Appendix. Tables 7, 8 and 9 summarize the data for interstate, four lane, and two lane highways, respectively. Table 10 is the summary for all highways. Tables 11, 12 and 13 are summaries in an FHWS format which is desired. The average speed for each classification of vehicles on each type of highway for this study was as follows: (June-September 1974 comparable speeds are shown in parentheses).

	<u>Interstate</u>	<u>Other Four Lane</u>	<u>Two-Lane</u>
<u>Passenger Cars:</u>			
Indiana	57.4 (58.3)	58.6 (58.0)	57.1 (56.8)
Non-Indiana	57.4 (59.3)	58.4 (57.9)	57.7 (55.9)
All Passenger Cars	57.4 (58.6)	58.6 (58.0)	57.1 (56.7)
85 Percentile (all)	60.9 (62.6)	63.3 (63.1)	62.3 (61.8)

Trucks:

Less than 5000 lbs.	56.6 (56.7)	56.9 (56.8)	55.6 (55.3)
5000 lbs. or more	56.7 (56.4)	55.4 (54.4)	53.6 (54.5)

All Vehicles:

Average	57.10	57.77	56.28
85 Percentile	60.90	62.80	61.80

The percent of vehicles exceeding the speed limit (55 mph) for each classification of vehicles and each type of highway was as follows:

	<u>Interstate</u>	<u>Other Four Lane</u>	<u>Two Lane</u>
<u>Passenger Cars:</u>			
Indiana	69.51	73.07	61.20
Non-Indiana	69.19	77.36	63.81
All Passenger Cars	69.43	73.54	61.46
<u>Trucks:</u>			
Less than 5000 lbs.	63.55	59.83	50.18
5000 lbs. or more	62.41	54.46	37.84
<u>All Vehicles:</u>	67.20	68.29	55.68

The percent of vehicles traveling more than 5 mph above the speed limit (exceeding 60 mph) for each case was as follows:

	<u>Interstate</u>	<u>Other Four Lane</u>	<u>Two Lane</u>
<u>Passenger Cars:</u>			
Indiana	21.67	32.91	25.21
Non-Indiana	21.35	31.13	23.81
All Passenger Cars	21.59	32.72	25.07
<u>Trucks:</u>			
Less than 5000 lbs.	18.06	27.62	19.79
5000 lbs. or more	16.47	16.07	8.49
<u>All Vehicles:</u>	20.07	29.28	21.48

The percent of vehicles traveling more than 10 miles per hour above the speed limit (exceeding 65 mph) for each case was as follows:

	<u>Interstate</u>	<u>Other Four Lane</u>	<u>Two Lane</u>
<u>Passenger Cars:</u>			
Indiana	4.03	10.24	7.26
Non-Indiana	4.32	9.43	4.76
All Passenger Cars	4.11	10.15	7.02
<u>Trucks:</u>			
Less than 5000 lbs.	3.87	8.79	6.71
5000 lbs. or more	2.55	1.79	.77
<u>All Vehicles:</u>	3.77	7.62	5.96

Summary and Conclusions

The overall average speeds in this study were found for passenger cars to be 57.6 mph. The overall average speed for heavy trucks was 55.5 mph. These results are about the same as those obtained in June-September 1974.

A comparison of speeds as found on the several types of highway for passenger cars and trucks of the 1975 data with that of 1974 and that obtained at a portion of the stations at another time in 1974 is shown in Tables A1, A2, and A3.

After a significant reduction of speed between 1973 and the period of a voluntary 55 mph speed limit and a further reduction during the beginning of the mandatory 55 mph speed limit (refer to Traffic Speed Report No. 92, JHRP), no further significant changes have occurred. The speed characteristics during May-June 1975 were about the same as those obtained earlier in June-August 1974 and in May 1974. No trend of increase in travel speeds is as yet apparent under the 55 mph maximum speed limit. Due to the limited speed data available, under the 55 mph speed limit, regression analysis was not performed.

TABLE A1: AVERAGE SPEEDS ON INTERSTATE HIGHWAYS

	<u>May-June 1975</u>	<u>June-Sept. 1974</u>	<u>May 1974</u>
<u>Passenger Cars:</u>			
Indiana	57.4	58.3	59.96
Non-Indiana	57.4	59.3	59.76
All Passenger Cars	57.4	58.7	59.92
85 Percentile (all)	60.9	62.6	62.96
<u>Trucks:</u>			
Less than 5000 lbs.	56.6	56.7	58.00
5000 lbs. or more	56.7	56.4	57.00

TABLE A2: AVERAGE SPEEDS ON OTHER FOUR-LANE HIGHWAYS

	<u>May-June 1975</u>	<u>June-Sept. 1974</u>	<u>May 1974</u>
<u>Passenger Cars:</u>			
Indiana	58.6	58.0	56.74
Non-Indiana	58.4	57.9	55.87
All Passenger Cars	58.6	58.0	56.62
85 Percentile (all)	63.3	63.1	62.38
<u>Trucks:</u>			
Less than 5000 lbs.	56.9	56.8	55.32
5000 lbs. or more	55.4	54.4	53.22

TABLE A3: AVERAGE SPEEDS ON TWO-LANE HIGHWAYS

	<u>May-June 1975</u>	<u>June-Sept. 1974</u>	<u>May 1974</u>
<u>Passenger Cars:</u>			
Indiana	57.1	56.8	58.70
Non-Indiana	57.7	55.9	57.14
All Passenger Cars	57.1	56.7	58.66
85 Percentile (all)	62.3	61.8	62.77
<u>Trucks:</u>			
Less than 5000 lbs.	55.6	55.3	55.86
5000 lbs. or more	53.6	54.5	53.89

APPENDIX

Speed Data (Tables 1 to 10)

TABLE 1 SPEED DATA

Station 1 Highway I-69 Location 3.3 miles south of S.R. 18 Weather Partly Cloudy
 No. of Lanes 4 Type of Surface Portland Cement Concrete Last Previous Observation (Speed Report No. 92)
 This Observation
 Date 5-15-75
 Time 10:45-3:20
 Date 8-5-74
 Time 11:20-1:10 p.m.

	PASSENGER CARS										TRUCKS					
	All		Indiana		Non-Indiana		All		<5000 lbs.		>5000 lbs.		Pres-		Pres-	
	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent
OBSERVATION																
No. of vehicles obs.	280	637	158	447	122	190	108	319	35	92	73	227				
Ave. speed (m.p.h.)	58.56	57.69	58.03	57.85	59.26	57.33	56.46	56.90	55.54	56.76	56.90	56.96				
Standard deviation	4.521	4.699	4.682	4.587	4.221	4.948	4.107	4.953	3.175	5.583	4.438	5.685				
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
44 m.p.h.	0.0	0.47	0.0	0.22	0.0	1.05	0.93	0.63	0.0	1.09	1.37	0.44				
49 m.p.h.	2.14	3.77	2.53	3.36	1.64	4.74	2.78	5.33	2.86	1.61	2.74	4.41				
54 m.p.h.	16.43	22.29	18.99	21.70	13.11	23.68	28.70	30.9	28.57	31.52	28.77	29.52				
59 m.p.h.	58.93	66.88	53.29	65.32	53.20	70.53	79.63	71.47	88.57	76.09	75.34	69.60				
64 m.p.h.	89.64	93.25	90.51	93.06	88.52	93.68	98.15	93.10	100.0	92.39	97.26	93.39				
69 m.p.h.	98.93	98.90	98.73	99.11	99.18	98.42	99.07	99.06	100.0	96.74	98.63	100.0				
74 m.p.h.	100.0	99.69	100.0	99.78	100.0	99.47	100.0	100.0	100.0	100.0	100.0	100.0				
79 m.p.h.	100.0	99.84	100.0	100.0	100.0	99.47	100.0	100.0	100.0	100.0	100.0	100.0				
84 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0				
89 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0				
No. of vehicles obs.	140	318	82	212	58	106	54	152	16	48	38	104				
Average speed	58.79	57.42	58.41	57.78	59.31	56.69	57.33	56.80	55.94	56.71	57.92	56.84				
No. of vehicles obs.	140	319	76	235	64	84	54	167	19	44	35	123				
Average speed	58.34	57.97	57.61	57.91	59.22	58.14	55.59	56.99	55.21	56.82	55.80	57.06				

TABLE 2 SPEED DATA

Station 3 Highway I-74 Location 1.0 mile east of Post Road Weather Clear
 No. of Lanes 4 Type of Surface Portland Cement Concrete
 This Observation Date 5-19-75 Last Previous Observation (Speed Report No. 92)
 Date 8-6-74
 Time 11:30-1:10 p.m.

OBSERVATION	PASSENGER CARS						TRUCKS					
	All			Indiana			Non-Indiana			All		
	Last	Pres-ent		Last	Pres-ent		Last	Pres-ent		Last	Pres-ent	
No. of vehicles obs.	284	799	206	619	78	180	109	422	54	218	55	204
Ave. speed (m.p.h.)	58.58	57.08	58.36	56.97	59.14	57.43	58.17	56.39	57.72	56.48	58.60	56.29
Standard deviation	4.422	4.350	4.370	4.277	4.535	4.585	5.490	4.688	6.772	4.835	3.857	4.536
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44 m.p.h.	0.35	0.38	0.49	0.32	0.0	0.56	1.83	0.47	0.0	0.46	1.82	0.0
49 m.p.h.	1.41	3.88	1.94	4.04	0.0	3.33	3.67	6.87	5.56	7.80	1.82	5.88
54 m.p.h.	15.49	25.41	16.99	26.17	11.54	22.78	22.02	30.33	37.04	30.73	7.27	29.90
59 m.p.h.	61.62	71.96	63.11	72.05	57.69	71.67	66.97	78.44	62.96	75.69	70.91	81.37
64 m.p.h.	91.55	95.24	92.23	95.64	89.74	93.89	89.91	95.97	83.33	95.41	96.36	96.57
69 m.p.h.	98.24	99.62	98.54	99.84	97.44	98.89	97.25	99.29	94.44	99.54	100.0	99.02
74 m.p.h.	99.30	100.0	99.51	100.0	98.72	100.0	99.08	99.76	98.15	100.0	100.0	99.51
79 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.76	100.0	100.0	100.0	99.51
84 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
89 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
* of vehicles traveling at or less than	142	355	98	265	44	90	54	184	27	91	27	93
	58.77	56.20	58.32	55.92	59.80	57.02	57.63	54.71	57.33	54.42	57.93	54.99
	142	444	108	354	34	90	55	238	27	127	28	111
	58.38	57.77	58.41	57.76	58.29	57.84	58.69	57.69	58.11	57.96	59.25	57.39

TABLE 3 SPEED DATA

Station 5 Highway U.S. 31 Location 1.2 miles south of U.S. 38

No. of Lanes 4 Type of Surface Asphalt Concrete Weather Partly Cloudy

This Observation
 Date 5-14-75
 Time 10:25-2:50 p.m.

Last Previous Observation (Speed Report No. 92)
 Date 6-20-74
 Time 11:50-2:15 p.m.

		PASSENGER CARS						TRUCKS					
		All		Indiana		Non-Indiana		All		<5000 lbs.		>5000 lbs.	
		Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent
OBSERVATION													
No. of vehicles obs.		280	647	248	562	32	85	139	316	31	147	108	169
Ave. speed (m.p.h.)		58.81	58.43	58.80	58.35	58.87	58.95	55.53	56.47	57.23	57.00	55.05	56.01
Standard deviation		5.120	5.153	5.069	5.218	5.587	4.698	5.163	5.916	5.045	6.771	5.116	5.031
24 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44 m.p.h.		0.71	0.31	0.40	0.36	3.13	0.0	1.44	2.53	0.0	2.04	1.85	2.96
49 m.p.h.		3.21	4.02	3.23	4.45	3.13	1.18	12.23	10.13	3.23	10.88	14.81	9.47
54 m.p.h.		16.79	20.71	17.74	21.89	9.38	12.94	43.17	35.76	38.71	35.37	44.44	36.09
59 m.p.h.		57.14	59.04	57.26	58.72	56.25	61.18	77.70	70.89	70.97	64.63	79.63	76.33
64 m.p.h.		86.79	89.34	86.29	89.68	90.63	87.06	96.40	93.35	87.10	89.12	99.07	97.04
69 m.p.h.		97.86	97.37	97.98	97.51	96.88	96.47	100.0	98.10	100.0	95.92	100.0	100.0
74 m.p.h.		99.64	99.54	100.0	99.47	96.88	100.00	100.0	99.37	100.0	98.64	100.0	100.0
79 m.p.h.		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
84 m.p.h.		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
89 m.p.h.		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of vehicles obs.		140	312	119	280	21	32	70	158	25	73	54	85
Average speed		58.76	59.02	58.72	58.97	59.00	59.47	56.97	57.42	64.96	57.73	56.33	57.15
No. of vehicles obs.		140	335	129	282	11	53	69	158	18	74	54	84
Average speed		58.85	57.88	58.87	57.74	58.64	58.64	54.07	55.52	60.17	56.28	53.76	54.85

TABLE 4 SPEED DATA

Station 8 Highway U.S. 52 Location 1.0 mile west of Klondike Weather Partly Cloudy
 No. of Lanes 4 Type of Surface Asphalt Concrete
 This Observation Date 5-13-75 Last Previous Observation (Speed Report No. 92)
 Date 10:00-3:30 Time 6-4-74
 Time 9:20-2:05 p.m.

OBSERVATION	PASSENGER CARS						TRUCKS					
	All		Indiana		Non-Indiana		All		<5000 lbs.		>5000 lbs.	
	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent
No. of vehicles obs.	280	328	259	307	21	21	108	147	60	92	48	55
Ave. speed (m.p.h.)	56.56	58.81	56.67	59.01	55.19	55.90	53.14	55.39	54.35	56.64	51.62	53.29
Standard deviation	5.752	6.840	5.744	6.906	5.810	5.078	6.894	7.302	5.883	7.430	7.781	6.632
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 m.p.h.	0.0	0.30	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34 m.p.h.	0.0	0.30	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 m.p.h.	0.36	0.61	0.39	0.65	0.0	0.0	2.78	3.40	1.67	1.09	4.17	7.27
44 m.p.h.	2.14	1.22	1.93	1.30	4.76	0.0	12.96	6.80	5.00	5.43	22.92	9.09
49 m.p.h.	8.21	5.18	7.72	4.89	14.29	9.52	24.07	18.37	15.00	15.22	35.42	23.64
54 m.p.h.	36.07	23.17	35.52	22.48	42.86	33.33	54.63	42.86	53.33	38.04	56.25	50.91
59 m.p.h.	71.07	57.01	70.27	55.70	80.95	76.19	84.26	73.47	81.67	66.30	87.50	85.45
64 m.p.h.	92.50	84.76	92.28	83.71	95.24	100.0	97.22	91.16	96.67	89.13	97.92	94.55
69 m.p.h.	98.93	92.38	98.84	91.86	100.0	100.0	100.0	97.96	100.0	96.74	100.0	100.0
74 m.p.h.	100.0	98.48	100.0	98.37	100.0	100.0	100.0	99.32	100.0	98.91	100.0	100.0
79 m.p.h.	100.0	99.39	100.0	99.35	100.0	100.0	100.0	99.32	100.0	98.91	100.0	100.0
84 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.32	100.0	98.91	100.0	100.0
89 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of vehicles obs.	140	193	127	181	13	12	54	79	29	51	25	28
Average speed	56.40	59.20	56.24	59.37	57.92	56.67	54.30	57.29	55.90	57.37	52.44	54.14
No. of vehicles obs.	140	135	132	126	8	9	54	68	31	41	22	27
Average speed	56.72	58.25	57.08	58.49	50.75	54.89	51.98	53.18	52.90	55.73	50.74	49.30

TABLE 5 SPEED DATA

Station 9 Highway U.S. 35 Location 1.5 miles east of Junction I-69

No. of Lanes 2 Type of Surface Asphalt Concrete Weather Cloudy

This Observation
Date 6-4-75
Time 11:30-3:30 p.m.

Last Previous Observation (Speed Report No. 92)
Date 8-27-74
Time 11:40-2:00 p.m.

OBSERVATION	PASSENGER CARS						TRUCKS					
	All		Indiana		Non-Indiana		All		<5000 lbs.		>5000 lbs.	
	Last	Pres- ent	Last	Pres- ent	Last	Pres- ent	Last	Pres- ent	Last	Pres- ent	Last	Pres- ent
No. of vehicles obs.	286	550	259	491	27	59	111	270	38	121	73	149
Ave. speed (m.p.h.)	56.95	58.38	56.90	58.34	57.41	58.69	54.74	55.63	55.55	57.28	54.32	54.29
Standard deviation	5.993	5.873	5.944	5.830	6.553	6.262	5.765	6.149	6.110	5.716	5.572	5.302
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44 m.p.h.	0.35	0.91	0.39	1.02	0.0	0.0	0.90	0.0	0.0	0.0	1.37	0.0
49 m.p.h.	8.39	5.45	9.27	5.50	0.0	5.08	11.71	13.70	2.63	7.89	16.44	17.45
54 m.p.h.	33.57	24.73	32.43	25.05	44.44	22.03	45.05	45.19	39.47	36.36	47.95	52.35
59 m.p.h.	71.33	57.27	71.43	57.64	70.37	54.24	81.08	75.56	81.58	64.46	80.82	84.56
64 m.p.h.	91.61	87.64	91.89	87.58	88.89	88.14	97.30	93.33	97.37	86.78	97.26	98.66
69 m.p.h.	96.50	79.09	96.91	97.15	92.59	96.61	99.10	97.04	97.37	94.21	100.0	99.33
74 m.p.h.	98.95	99.09	99.23	99.19	96.30	98.31	99.10	100.0	97.37	100.0	100.0	100.0
79 m.p.h.	99.65	99.82	99.61	100.0	100.0	98.31	99.10	100.0	97.37	100.0	100.0	100.0
84 m.p.h.	99.65	99.82	99.61	100.0	100.0	98.31	100.0	100.0	100.0	100.0	100.0	100.0
89 m.p.h.	99.65	100.0	99.61	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of vehicles obs.	143	295	125	264	18	31	55	152	22	73	33	79
Average speed	57.41	58.11	57.29	58.09	58.22	58.29	55.36	56.37	57.23	58.78	54.12	54.15
No. of vehicles obs.	143	255	134	227	9	28	56	118	16	48	40	70
Average speed	56.50	58.69	56.54	58.63	55.78	59.14	54.12	54.67	53.25	55.00	54.47	54.44

TABLE 6 SPEED DATA

Station 12 Highway S.R. 25 Location 0.7 mile west of Americus Weather Clear
 No. of Lanes 2 Type of Surface Asphalt Concrete
 This Observation Last Previous Observation (Speed Report No. 92)
 Date 5-16-75 Date 6-6-74
 Time 10:20-2:20 p.m. Time 12:40-2:35 p.m.

	PASSENGER CARS										TRUCKS					
	All		Indiana		Non-Indiana		All		<5000 lbs.		>5000 lbs.					
	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent				
OBSERVATION																
No. of vehicles obs.	289	519	270	473	19	46	108	272	53	162	55	110				
Ave. speed (m.p.h.)	55.78	55.79	55.86	55.73	54.58	56.39	53.23	53.61	53.43	54.30	53.04	52.59				
Standard deviation	5.280	5.054	5.295	5.154	5.048	3.879	4.948	5.717	4.435	5.847	5.430	5.385				
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
39 m.p.h.	0.0	0.39	0.0	0.42	0.0	0.0	0.0	2.94	0.0	2.47	0.0	3.64				
44 m.p.h.	0.69	1.35	0.74	1.48	0.0	0.0	3.70	6.62	0.0	6.17	7.27	7.27				
49 m.p.h.	7.96	9.06	7.41	9.73	15.79	2.17	19.44	19.49	16.98	160.5	21.82	24.55				
54 m.p.h.	43.25	39.69	43.33	40.59	42.11	30.43	56.48	54.04	60.38	50.62	52.73	59.09				
59 m.p.h.	80.28	79.96	80.00	79.28	84.21	86.96	90.74	88.24	90.57	85.19	90.91	92.73				
64 m.p.h.	94.12	94.99	93.70	94.71	100.0	97.83	100.0	98.16	100.0	96.91	100.0	100.0				
69 m.p.h.	98.27	99.61	98.15	99.58	100.0	100.0	100.0	99.63	100.0	99.38	100.0	100.0				
74 m.p.h.	99.65	99.81	99.63	99.79	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0				
79 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0				
84 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0				
89 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0				
# of vehicles traveling at or less than																
No. of vehicles obs.	149	277	136	251	13	26	54	142	23	79	31	63				
Average speed	55.54	55.57	55.58	55.44	55.15	56.77	54.09	53.69	53.43	54.65	54.58	52.49				
No. of vehicles obs.	140	242	134	222	6	20	54	142	23	79	31	63				
Average speed	56.03	56.05	56.15	56.06	53.33	55.90	52.37	53.52	53.43	53.98	51.04	52.72				
All Vehicles																
Bnd																

TABLE 7 SPEED DATA

Station 1, 3 Highway Interstate Location Sec Individual Stations Weather _____

No. of Lanes _____ Type of Surface _____ Last Previous Observation (Speed Report No. 92) _____

This Observation _____ Date _____ Time _____

Date _____ Time _____

	PASSENGER CARS										TRUCKS					
	All		Indiana		Non-Indiana		All		<5000 lbs.		>5000 lbs.		Pres-		Pres-	
	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent
OBSERVATION																
No. of vehicles obs.	1130	1436	661	1066	469	370	499	741	179	310	320	431				
Ave. speed (m.p.h.)	58.69	57.35	58.29	57.34	59.26	57.38	56.47	56.61	56.70	56.56	56.35	56.64				
Standard deviation	4.682	4.517	4.729	4.429	4.559	4.769	4.859	4.807	5.593	5.061	4.400	4.622				
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.60	0.13	0.0	0.32	0.94	0.0				
44 m.p.h.	0.18	0.42	0.30	0.28	0.0	0.81	1.20	0.54	0.56	0.97	1.56	0.23				
49 m.p.h.	1.50	3.83	2.12	3.75	0.64	4.05	6.01	6.21	7.26	7.74	5.31	5.10				
54 m.p.h.	17.08	24.03	19.36	24.30	13.86	23.24	32.06	30.23	35.20	30.97	30.31	29.70				
59 m.p.h.	58.94	69.71	62.03	69.23	54.58	71.08	77.76	75.44	73.18	75.81	80.31	75.17				
64 m.p.h.	90.09	94.36	90.47	94.56	89.55	93.78	95.79	94.74	92.18	94.52	97.81	94.90				
69 m.p.h.	97.88	99.30	97.88	99.53	98.87	98.65	98.60	99.19	96.65	98.71	99.69	99.54				
74 m.p.h.	99.73	99.86	99.85	99.91	99.57	99.73	99.80	99.87	99.44	100.0	100.0	100.0				
79 m.p.h.	99.91	99.93	100.0	100.9	99.79	99.73	100.0	99.87	100.0	100.0	100.0	99.77				
84 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0				
89 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0				
All Vehicles																
% of Vehicles traveling at or less than																

TABLE 8 SPEED DATA

Station 5, 8 Highway 4-Lanes Location See Individual Stations Weather _____

No. of Lanes _____ Type of Surface _____

This Observation _____ Last Previous Observation (Speed Report No. 92)

Date _____ Date _____

Time _____ Time _____

OBSERVATION	PASSENGER CARS						TRUCKS					
	All		Indiana		Non-Indiana		All		<5000 lbs.		>5000 lbs.	
	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent
No. of vehicles obs.	1092	975	931	869	161	106	464	463	178	239	286	224
Ave. speed (m.p.h.)	57.97	58.56	57.98	58.58	57.88	58.35	55.30	56.13	56.81	56.86	54.36	55.34
Standard deviation	6.172	5.775	6.270	5.875	5.592	4.905	7.020	6.401	7.145	7.019	6.786	5.576
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 m.p.h.	0.0	0.10	0.0	0.12	0.0	0.0	0.22	0.0	0.56	0.0	0.0	0.0
34 m.p.h.	0.09	0.10	.11	0.12	0.0	0.0	0.43	0.0	0.56	0.0	0.35	0.0
39 m.p.h.	.18	0.21	.21	0.23	0.0	0.0	1.72	1.51	1.12	1.26	2.10	1.79
44 m.p.h.	1.56	0.62	1.61	0.69	1.24	0.0	7.33	3.89	3.93	3.35	9.44	4.46
49 m.p.h.	5.59	4.41	6.12	4.60	4.97	2.83	16.59	12.74	9.55	12.55	20.98	12.95
54 m.p.h.	27.20	21.54	27.50	22.09	25.47	16.98	43.75	38.01	38.76	36.40	46.85	39.73
59 m.p.h.	62.91	58.36	63.05	57.65	62.11	64.15	75.65	71.71	69.66	65.27	79.37	78.57
64 m.p.h.	87.00	87.79	86.90	87.57	87.58	89.62	91.59	92.66	84.83	89.12	95.80	96.43
69 m.p.h.	95.97	95.69	95.81	95.51	96.89	97.17	97.84	98.06	96.07	96.23	98.95	100.0
74 m.p.h.	99.36	99.18	99.36	99.08	99.38	100.0	99.35	99.35	99.44	98.74	99.30	100.0
79 m.p.h.	99.73	99.79	99.68	99.77	100.0	100.0	99.78	99.78	99.44	99.58	100.0	100.0
84 m.p.h.	99.91	100.0	99.89	100.0	100.0	100.0	99.78	99.78	99.44	99.58	100.0	100.0
89 m.p.h.	99.91	100.0	99.89	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

All Vehicles

of vehicles
traveling at or less
than

TABLE 9 SPEED DATA

Station <u>9, 12</u>	Highway <u>2-Lane</u>	Location <u>See Individual Stations</u>	Weather <u></u>
No. of Lanes <u></u>	Type of Surface <u></u>	Last Previous Observation (Speed Report No. <u>92</u>)	
This Observation		Date <u></u>	Time <u></u>

All Vehicles	OBSERVATION	PASSENGER CARS						TRUCKS					
		All		Indiana		Non-Indiana		All		<5000 lbs.		>5000 lbs.	
		Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent
	No. of vehicles obs.	1138	1069	1021	964	117	105	439	542	193	283	246	259
	Ave. speed (m.p.h.)	56.74	57.12	56.84	57.06	55.88	57.69	54.83	54.62	55.26	55.58	54.49	53.57
	Standard deviation	6.292	5.638	6.321	5.658	5.986	5.450	5.871	6.016	6.272	6.395	5.525	5.393
	24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	39 m.p.h.	.18	0.19	.10	0.21	.85	0.0	.91	1.48	1.04	1.41	0.81	1.54
	44 m.p.h.	1.14	1.12	1.08	1.24	1.71	0.0	3.87	4.06	3.11	4.24	4.47	3.86
	49 m.p.h.	8.61	7.20	8.23	7.57	11.97	3.81	16.17	16.61	14.51	13.07	17.48	20.46
	54 m.p.h.	37.87	31.99	37.22	32.68	43.59	25.71	44.42	49.63	40.93	44.52	47.15	55.21
	59 m.p.h.	71.18	68.29	70.81	68.26	74.36	68.57	80.64	81.92	77.72	76.33	82.93	88.03
	64 m.p.h.	90.86	91.21	90.40	91.08	94.87	92.38	97.04	95.76	96.37	92.58	97.56	99.23
	69 m.p.h.	96.57	98.32	96.47	98.34	97.44	98.10	98.86	98.34	97.41	97.17	100.0	99.61
	74 m.p.h.	98.77	99.44	98.73	99.48	99.15	99.05	99.32	100.0	98.45	100.0	100.0	100.0
	79 m.p.h.	99.65	99.91	99.61	100.0	100.0	99.05	99.77	100.0	99.48	100.0	100.0	100.0
	84 m.p.h.	99.74	99.91	99.71	100.0	100.0	99.05	99.77	100.0	100.0	100.0	100.0	100.0
	89 m.p.h.	99.82	100.0	99.80	100.0	100.0	100.0	99.77	100.0	100.0	100.0	100.0	100.0

TABLE 10 SPEED DATA

Station 1,3,5,8,9,12 Highway Indiana System Location See Individual Stations Weather _____

No. of Lanes _____ Type of Surface _____

This Observation _____ Last Previous Observation (Speed Report No. 92) _____

Date _____ Date _____

Time _____ Time _____

OBSERVATION	PASSENGER CARS						TRUCKS					
	All		Indiana		Non-Indiana		All		<5000 lbs.		>5000 lbs.	
	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent
No. of vehicles obs.	3360	3480	2613	2899	747	581	1402	1746	550	832	852	914
Ave. speed (m.p.h.)	57.80	57.62	57.61	57.62	58.44	57.61	55.57	55.86	56.23	56.31	55.14	55.45
Standard deviation	5.814	5.279	5.971	5.347	5.181	4.928	5.995	5.710	6.393	6.148	5.687	5.249
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 m.p.h.	0.0	0.03	0.0	0.03	0.0	0.0	0.07	0.0	0.18	0.0	0.0	0.0
34 m.p.h.	.03	0.03	.04	0.03	0.0	0.0	.14	0.0	.18	0.0	.12	0.0
39 m.p.h.	.12	0.11	.11	0.14	.13	0.0	1.07	0.92	.73	0.96	1.29	.88
44 m.p.h.	0.95	0.69	1.07	0.72	.54	0.52	4.07	2.52	2.55	2.76	5.05	2.30
49 m.p.h.	5.36	5.03	5.93	5.28	3.35	3.79	12.70	11.17	10.55	10.94	14.08	11.38
54 m.p.h.	27.41	25.78	29.24	26.42	21.02	22.55	39.80	38.32	38.36	37.14	40.73	39.39
59 m.p.h.	64.38	66.09	65.82	65.44	59.30	69.36	77.96	76.46	73.64	72.96	80.75	79.65
64 m.p.h.	89.35	91.55	89.17	91.31	89.96	92.77	94.79	94.50	91.27	92.31	97.07	96.50
69 m.p.h.	96.82	97.99	96.59	97.93	97.59	98.28	98.43	98.63	96.73	97.48	99.53	99.67
74 m.p.h.	99.29	99.54	99.23	99.52	99.46	99.66	99.50	99.77	99.09	99.64	99.77	99.89
79 m.p.h.	99.76	99.89	99.73	99.93	99.87	99.66	99.86	99.89	99.64	99.88	100.0	99.89
84 m.p.h.	99.88	99.97	99.85	100.0	100.0	99.83	99.93	99.94	99.82	99.88	100.0	100.0
89 m.p.h.	99.91	100.0	99.89	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

All Vehicles

% of Vehicles
traveling at or less
than

Interim Quarterly Reports

Monitoring of Speed (Statistical Summary)

Passenger Cars (P.C.)

State: Indiana

Calendar Quarter Ending: June 30, 1975

Miles	Number of Monitor Locations	Frequency of Monitoring During Quarter	Duration of Monitoring 4 hours each location	Average Speed (MPH)	Median Speed (MPH)	85th Percentile Speed (MPH)	Percent of Motorists Exceeding		
							55 MPH	60 MPH	65 MPH
Interstate Rural	2	once each location	4 hours each location	57.35	56.65	60.85	69.52	71.6	4.1
Interstate Urban									
Other multi- lane divided rural	2	once each location	4 hours each location	58.56	58.10	63.30	73.53	72.7	10.2
Other multi- lane divided urban									
Undivided Rural	2	once each location	3 1/2 hours each location	57.12	56.50	62.25	61.52	55.0	7.0
Undivided Urban									
State Total	6			57.62	56.80	62.25			

Interim Quarterly Reports

Trucks
(T.)

Monitoring of Speed (Statistical Summary)

State: Indiana

Calendar Quarter Ending: June 30, 1975

Miles	Number of Monitor Locations	Frequency of Monitoring During Quarter	Duration of Monitoring 4 hours each location	Average Speed (MPH)	Median Speed (MPH)	85th Percentile Speed (MPH)	Percent of Motorists Exceeding		
							55 MPH	60 MPH	65 MPH
Interstate Rural	2	once each location	4 hours each location	56.61	56.20	60.70	62.9	7.2	3.1
Interstate Urban									
Other multi-lane divided rural	2	once each location	4 hours each location	56.13	56.10	61.65	57.3	22.0	5.4
Other multi-lane divided urban									
Undivided Rural	2	once each location	3 1/2 hours each location	54.62	54.20	59.80	44.3	14.4	3.9
Undivided Urban									
State Total	6			55.86	55.60	60.75			

Interim Quarterly Reports

All Vehicles

Monitoring of Speed (Statistical Summary)

State: Indiana

Calendar Quarter Ending: June 30, 1975

Miles	Number of Monitor Locations	Frequency of Monitoring During Quarter	Duration of Monitoring	Average Speed (MPH)	Median Speed (MPH)	85th Percentile Speed (MPH)	Percent of Motorists Exceeding		
							55 MPH	60 MPH	65 MPH
Interstate Rural	2	once each location	4 hours each location	57.10	56.50	60.90	57.2	60.1	3.8
Interstate Urban									
Other multi-lane divided rural	2	once each location	4 hours each location	57.77	57.40	62.80	58.3	59.3	7.6
Other multi-lane divided urban									
Undivided Rural	2	once each location	3 1/2 hours each location	56.28	55.80	61.80	55.7	61.5	6.0
Undivided Urban									
State Total	6			57.03	56.50	61.60			

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